CENTRAL INTELLIGENCE AGENCY

INFORMATION REPORT

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SECURITY INFORMATION

25X1

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THE SOURCE EVALUATIONS IN THIS REPORT ARE DEFINITIVE.
THE APPRAISAL OF CONTENT IS TENTATIVE.
(FOR KEY SEE REVERSE)

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A. Radar development

1. In the middle of December 1952, a Russian commission visited the Funkwerk Koepenick to inspect progress on the radar development there. The Germans understood that the commission was from Berlin-Karlshorst. One of the members of the commission was Litvinov.

2. The main point made by the commission was that the weight of the apparatus - about 200 Kgs - was too great. They wished the weight to be about 75 Kgs. The weight of the present Koepenick model is attributable mainly to the fact that no permanent magnets of the necessary field strength are available in East Germany, because of the lack of high quality magnet steel. An electromagnet, therefore, has to be employed for the magnetron; consequently, a stabilization unit - 220V, 1A - has to be employed, using 12 tubes of type RV 12 P35. By the end of the year, the commission had still not made known any decision on this matter.

3. Development work on the antenna and reflector of the radar installation was not yet finished in late December. A funnel-shaped horn aerial (Hornstrahler) with a rectangular cross-section is being used. A temporary rotating parabolic reflector of aluminum has also been constructed.[1]

4. (a) The problem of simultaneous operation (Simultan-betrieb) of the antenna has still not been solved. It is thought that gas-filled antenna chokes (Nulloden) will be obtained from the HF Telecommunications Plant (OSW).

   (b) The necessary drawn brass tubing for the transmission lines (10 x 23 mm in open cross-section) had been obtained [redacted] In late December it was being silvered in the Koepenick plant.

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25 YEAR RE-REVIEW

STATE	ARMY	NAVY	AIR	FBI	OIT	ORR Ev	OSI Ev
x	x	x	x		x	x	x

(Note: Washington Distribution Indicated By "X"; Field Distribution By "#".)

B. Echolot

5. Two echolot devices, Koepenick number ELA--10, were to be completed by 31 December 1952. These devices can be used either as echo depth sounding equipment or as detectors for schools of fish. In October 1952, the device (instrument no. 203) was tested by a captain of a fishing vessel; by means of the device, 2,600 centner fish were caught by his crew, while a control ship, not equipped with the echolot, only caught 1,300 centner.

6. The echolot has two ranges: 0-100 m and 0-1200 m. The apparatus has a supersonic transmitter and receiver. The transmiitter frequency is 31.25 kcs. The impulse frequency (Tastfrequenz) at a range of 0-100 m is 7.5 cps; at 0-1200 m 0.625 cps. Keying is achieved by a motor-driven camshaft. The range can be recorded and read on a tape.

7. Thirty of the echolot devices are to be produced in 1952, but it is not yet clear where this will be done.

C. Miscellaneous

8. No members of Funkwerk Koepenick are known to have visited the USSR for repair or installation work in the last two or three years. The only visits to Satellites known are those of two members of the staff to China, Czechoslovakia, and Rumania to service East German diplomatic wireless service installations in those countries.

9. Test oscillators of unstated specifications have recently been acquired [redacted] 25X1 They are being used in departments TEA and TEK (aerial and commercial radio development, respectively.) 25X1

10. At the end of 1952, the only test instruments being developmed by Dr. Heinrich Weber's Test Instrument Section were spectrometers for sonic and supersonic ranges, up to 18 kcs. Apart from these, Dr. Weber's section was engaged only on building impulse generators and oscillographs.

11. In late December, Dr. Rudolf Kaiser was engaged in work in the field of supersonics. Earlier in the year he had been working on the "Radio Berlin" station. Neither field involved work with any single side band transmitters.

12. On 26 November 1952, all the technical development (TE) sections of Funkwerk Koepenick received a circular from a representative of the management. This stated that:

a. Tube type LS 50 was not being made in East Germany, and there was no prospect possibility of procuring this valve. Development plans were to take co account of this fact.

b. Tube type GY11 was to be made in East Germany instead of RG 62. Development work on GY 11 was not expected to be finished before the end of 1953.

[redacted] 25X1